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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,096	10/04/2000	Sol Aisenberg	EXC-0001	9651

23413 7590 10/21/2002

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EXAMINER

JEFFERY, JOHN A

ART UNIT	PAPER NUMBER
3742	18

DATE MAILED: 10/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/679,096	AISENBERG ET AL.	
Examiner	Art Unit		
John A. Jeffery	3742		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 August 2002.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 36-43 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 41 and 43 is/are allowed.

6) Claim(s) 36-40 and 42 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). ____ .
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6) Other: _____

DETAILED ACTION

Statutory Text Omitted

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbertson (US4634839) in view of Tomaro (US4327278) and further in view of Nosenchuck (US5841943). Gilbertson (US4634839) discloses an electrically heated

dryer with a blower for directing air via cylindrical nozzle 34. See Col. 1, lines 5-15.

The claim differs from the previously cited prior art in calling for the blower to generate an air velocity of no less than 18,000 fpm. According to the instant specification on Page 17, lines 10-15, to achieve such an airflow rate, a motor that operates at greater than 15,000 rpm must be used. While the specific air velocity of the blower of the previously described apparatus is not recited, providing blowers which operate in

excess of 15,000 rpm in electrically heated hair dryers is conventional and well known in the art as evidenced by Tomaro (US4327278) noting Col. 2, lines 55-57 wherein a blower motor with a loaded speed of 19,000 rpm is disclosed. In view of Tomaro (US4327278), it would have been obvious to one of ordinary skill in the art to utilize a blower motor in excess of 15,000 rpm in the previously described apparatus in order to increase the rotational rate of the blower thereby increase the heated airflow issuing therefrom. While motor rotation rate is not the only parameter involved that affects airflow, it is a substantial factor in achieving a desired flow rate. This is evidenced by Applicant's point in the specification noting the criticality of the motor rpm value of greater than 15,000 rpm. Moreover, the design techniques to achieve a desired heat output of a dryer for human use is well known to those skilled in the art. According to Nosenchuck (US5841943) in col. 7, lines 45-54, the choice of (1) the shape of the dryer housing and outer duct, (2) the axial length of the annular duct, (3) the variation in area of such annular duct, (4) the number of stator and rotor stages, (5) the shapes and number of blades are "all capable of being chosen by those skilled in the art using principles of aerodynamics and fluid mechanics." (emphasis added.) See generally Nosenchuck (US5841943), col. 7, lines 34 - col. 8, line 65. To determine the heat output of the dryer, the well-known equation as shown in col. 7, line 65 is used. As noted in col. 8, lines 2-5, the maximum exit air temperature is set by established industry standards. Thus, the required mass flow can be determined using the equation. Moreover, the airflow envelope of the ducts is typically chosen according to known engineering design principles. The airflow exit velocity being an important parameter in

that regard. Col. 8, lines 35-42. Once the total mass flow is determined, the required dimensions for the ducts can then accordingly be determined. Col. 8, lines 42-53. Thus, in view of Nosenchuck, the specific parameters affecting air flow rate which ultimately affects the heat output of the dryer of the base references are all design choices using well-known principles of aerodynamics and fluid mechanics and are therefore within the level of one of ordinary skill in the art. Furthermore, it is well settled that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233,235 (CCPA 1955). Here, choosing the specific parameters of other factors influencing airflow rate such as fan blade size, angle, and the like to maximize the flow rate of aspirated air in a heated air blower is well within the parameters of routine experimentation. Furthermore, while the specific (1) outlet size, (2) outlet length, (3) air jet pressure, and (4) air jet temperature are not specified, choosing the optimum (1) dimensions for the outlet, (2) air jet pressure, and (3) air jet temperature to achieve a desired convective heating effect is well within the level of one of ordinary skill in the art and would be the product of routine experimentation and optimization.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbertson (US4634839) in view of Tomaro (US4327278), Nosenchuck (US5841943), Rose (US4461439), and further in view of Clemens (US2634514). The claim differs from the previously cited prior art in calling for the dryer to be wall-mounted. Mounting a

handheld dryer on the wall is conventional and well known in the art as evidenced by Rose (US4461439) noting mounting stand 10 which enables the handheld dryer to be wall-mounted thereby facilitating drying functions without the need to hold the dryer. In view of Rose (US4461439), it would have been obvious to one of ordinary skill in the art to wall-mount the dryer of the previously described apparatus in order to facilitate drying functions without the need to hold the dryer. The claim also differs from the previously cited prior art in calling for the air jet to be angled towards the wall to blow water away from the user. Angling an air outlet such that water is blown away from the user is conventional and well known in the art as evidenced by Clemens (US2634514) noting angled outlet 12 which directs air such that "the air has no tendency to blow droplets from the user's hands onto his clothing." Col. 3, lines 25-31. In view of Clemens (US2634514), it would have been obvious to one of ordinary skill in the art to provide an angled outlet in the previously described apparatus so that water was directed away from the user during use.

Allowable Subject Matter

Claims 41 and 43 are allowable over the art of record.

Response to Arguments

Applicant's arguments have been considered but are deemed to be moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this or earlier communications from the examiner should be directed to John A. Jeffery at telephone number (703) 306-4601 or fax (703) 305-3463. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM EST. The examiner can also be reached on alternate Fridays.

The fax phone numbers for the organization where this application or proceeding is assigned are:

Before Final (703) 872-9302

After Final (703) 872-9303

Customer Service (703) 872-9301

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0861.



**JOHN A. JEFFERY
PRIMARY EXAMINER**

10/17/02